

Yttria

NANOE

We offer two main types of yttria powders: one with binding system (Y_2O_3 -BA), one without (Y_2O_3). The powders are available in spray-dried granulates, in slurries, or in ceramic injection molding.

Key Benefits

High thermal resistance

General characteristics		Y_2O_3 -BA / Y_2O_3
Loss on ignition	wt%	4 / 2
Average crystallite size	nm	150
Free density	g/cm^3	1.3
Minimum purity	%	99.9
Cristalline phase		Cubic
Specific surface area	m^2/g	20 ± 2
Granulates size	μm	35

Purity		Y_2O_3
Y_2O_3 + other rare earth	wt%	> 99.9
ZrO ₂	ppm	< 500
Al ₂ O ₃	ppm	< 500
Na ₂ O	ppm	< 50
SiO ₂	ppm	< 50
Other RE (Nd, La, Dy...)	ppm	< 1000

Sintering		Y_2O_3
Compaction force	MPa	> 200
Sintering temperature	°C	1580
Sintered density	g/cm^3	4.98 (99%)
Intercept grain size	μm	1

High chemical resistance

